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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/600,478

06/20/2003

Peter S. Aronstam

014-28331-US

7107

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7590

06/08/2005

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EXAMINER

HELLNER, MARK

ART UNIT

PAPER NUMBER

3663

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/600,478

Applicant(s)

ARONSTAM, PETER S.

Examiner

Mark Hellner

Art Unit

3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26 is/are allowed.
- 6) ☒ Claim(s) 1-15, 18-20 and 23-25 is/are rejected.
- 7) ☒ Claim(s) 16, 17, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4122004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6, 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Franzoso et al.

Franzoso et al disclose a signal transmission line comprising: a first optical fiber (3100) having a plurality of spaced apart sections (3300 and 3400) doped with material that amplifies optical signals when optical energy is applied thereto; a second optical fiber (3800) adjacent to the first optical fiber; means (3600 and 3700) for coupling the second fiber to the doped sections of the first fiber; and remote pumping means (3500) for applying pumping energy to the doped sections via the second fiber.

The structure above reads on claims 1 and 10.

Claim 6 is taught by the signal input label.

Claim 12 is taught by elements (3600) and (3700).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3663

Claims 2-5, 7-9, 11, 13-15, 18-20 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franzoso et al in view of Hodgson et al (6,365,891).

The differences between Franzoso et al and the subject matter recited by claims 2-5, 11 and 13 would have been met by notoriously known structure for protecting a fiber communication element from a harsh marine environment.

The differences recited by claims 7-9, 14, 15, 18- 20 and 23-25 would have been met by the connection of an array of marine sensors to the amplifier disclosed by Franzoso et al.

Hodgson et al is cited to teach that is was known at the time of the present application to connect arrays of marine sensors (110) to erbium doped amplifiers (130) and, as such, provides a person of ordinary skill in the art the motivation to provide the structure that would have met differences pointed out above.

Claims 16,17, 21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 26 is allowed.

Bourret et al discloses pumping means disposed between first and second communication fibers that are operating in opposed directions. However, there is no teaching or suggestion of the pumping fiber being coupled to a plurality of doped sections within each of the first and second fibers.

Art Unit: 3663

Any inquiry concerning this communication should be directed to Mark Hellner at telephone number 571 272 6981.

Mark Hellner
Primary Examiner
AU 3663

A handwritten signature in black ink, appearing to read "Mark Hellner", with a stylized flourish at the end.